

**Form PTO-1449 (Substitute) U.S. Department of Commerce
Patent and Trademark Office**
INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)

Application Number	10/821,726
Filing Date	April 8, 2004
First Named Inventor	Michael Wayne Graham
Art Unit	1635
Examiner Name	Whiteman, Brian A.
Attorney Docket No.	0687/74768-AAA/JPW/GJG/ACK

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	33	2005/0095199 A1 (including complete file history)	05-05-2005	Steven Whyard et al.
	39	12/798,247	03-31-2010	Waterhouse et al.
	44	5,413,906	05-09-1995	Eberle et al.
	45	5,602,424	02-11-1997	Ahlquist et al.
	60	6,451,603	09-17-2002	Atkins et al.
	66	6,919,466	07-19-2005	Lightner et al.
	67	2002/0166144	11-07-2002	Green et al.
	89	7,754,697	07-13-2010	Graham et al.
	96	6,146,886	11-14-2000	Thompson

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶
	2	WO 95/08350	03-30-1995	Reed	
	3	WO 94/07367	04-14-1994	Moelling	
	4	EP 0532380	01-07-1999	Miyata et al.	
	52	EP 0784094 A1	07-16-1997	Bozzoni	
	53	EP 0779365 A2	06-18-1997	Rabbani et al.	
	54	WO 98/50408 A1	11-12-1998	Fournier et al.	
	55	WO 03/095647 A2	11-20-2003	Bozzoni et al.	
	97	EP 0387775	09-19-1990	Beug	
	98	WO 00/63397	10-26-2000	Meulewaeter	

**EXAMINER
SIGNATURE**
DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.¹ Applicant's unique citation designation number (optional).² See Kinds of Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the twodigit code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English Language Translation is attached.

**Applicants: Michael Wayne Graham
et al.**
Serial No.: 11/218,999
Filed: September 2, 2005
Exhibit 1

Form PTO-1449 (Substitute) U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Application Number	10/821,726
	Filing Date	April 8, 2004
	First Named Inventor	Michael Wayne Graham
	Art Unit	1635
	Examiner Name	Whiteman, Brian A.
	Attorney Docket No.	0687/74768 - AAA/JPW/GJG/ACK

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	November 2, 2010 Communication from the UK Intellectual Property Office in connection with GB 2353282, including a Request for Revocation Under s72 UK Patent Act 1977 filed September 29, 2010 and amended Request for Revocation Under s72 UK Patent Act 1977 filed October 28, 2010	
	5	Ecker, J.R., Davis, R.W., (1986) "Inhibition of gene expression in plant cells by expression of antisense RNA," PNAS 83(15): 5372-5376	
	6	Fire et al. (1998) "Potent and Specific Genetic Interference by Double-Stranded RNA in Caenorhabditis elegans" Nature 391:806-822	
	7	Stam et al. (1997) "Post-Transcriptional Silencing of Chalcone Synthase in Petunia by Inverted Transgene Repeats," The Plant Journal Vol. 12, No. 1, pp. 63-82	
	8	Pal-Bhadra, M., Bhadra U. and Birchler, J.A. (1997) "Cosuppression in Drosophila: Gene Silencing of Alcohol Dehydrogenase by White-Adh Transgenes is Polycomb Dependent" Cell 90(3):479-90	
	9	Romano, N., et al. (1992) "Quelling: Transient Inactivation of Gene Expression in Neurospora Crassa by Transformation with Homologous Sequences" Molecular Microbiology 6(22): 3343-3353	
	10	Office Action issued October 1, 2009 in connection with U.S. Serial No. 10/571,384, filed June 1, 2006	
	11	Notification of Non-compliant Appeal Brief in Ex Parte Reexamination issued October 22, 2009 in connection with Merged Reexamination Nos. 90/007,247 and 90/008,096, filed October 4, 2004 and May 18, 2006, respectively	
	12	Communication in Response to Notification of Non-compliant Appeal Brief submitted November 2, 2009 in connection with Merged Reexamination Nos. 90/007,247 and 90/008,096, filed October 4, 2004 and May 18, 2006, respectively	
	13	Amendment submitted November 5, 2009 in connection with U.S. Serial No. 09/287,632, filed April 7, 1999	
	14	Office Action issued November 4, 2009 in connection with U.S. Serial No. 11/364,183, filed March 1, 2006	

EXAMINER
SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional) Applicant is to place a checkmark here if English language Translation is attached.

Form PTO-1449 (Substitute) U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Application Number	10/821,726
	Filing Date	April 8, 2004
	First Named Inventor	Michael Wayne Graham
	Art Unit	1635
	Examiner Name	Whiteman, Brian A.
	Attorney Docket No.	0687/74768-AAA/JPW/GJG/ACK

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume/issue number(s), publisher, city and/or country where published.	T ²
	15	Examiner's Answer issued January 7, 2010 in response to applicant's Appeal Brief filed 7/27/09 in connection with Merged Reexamination Nos. 90/007,247 and 90/008,096, filed October 4, 2004 and May 18, 2006, respectively	
	16	Supplemental Amendment To October 15, 2009 Amendment Filed In Response To May 15, 2009 Final Office Action, Summary of Examiner Interviews, And Supplemental Information Disclosure Statement submitted December 21, 2009 in connection with U.S. Serial No. 10/346,853, filed January 17, 2003	
	17	Amendment in Response to May 15, 2009 Final Office Action as a Submission to Accompanying Request for Continued Examination submitted October 15, 2009 in connection with U.S. Serial No. 10/346,853, filed January 17, 2003	
	18	Supplemental Amendment to September 24, 2009 Amendment, Summary of December 17, 2009 Examiner Interview, and Supplemental Information Disclosure Statement submitted December 21, 2009 in connection with U.S. Serial No. 10/759,841, filed January 15, 2004	
	19	Terminal Disclaimer submitted November 11, 2009 in connection with U.S. Serial NO. 10/646,070, filed July 13, 2005	
	20	Terminal Disclaimer submitted December 14, 2009 in connection with U.S. Serial NO. 10/646,070, filed July 13, 2005	
	21	Office Action issued October 9, 2009 in connection with U.S. Serial No. 11/218,999, filed September 2, 2005	
	22	Declaration of David M. Stalker filed in opposition to Australian Patent Application No. 778474 (November 4, 2008)	
	23	Reply Brief to Examiner's Answer filed on 8/26/09, application no. 10/805,804	
	24	Appeal Brief filed on 3/6/09 in Application No. 10/805,804	
	25	Office Action issued December 8, 2009 in connection with U.S. Serial No. 09/287,632, filed April 7, 1999	

**EXAMINER
SIGNATURE**

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). Applicant is to place a checkmark here if English language Translation is attached.

Form PTO-1449 (Substitute) U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Application Number	10/821,726
	Filing Date	April 8, 2004
	First Named Inventor	Michael Wayne Graham
	Art Unit	1635
	Examiner Name	Whiteman, Brian A.
	Attorney Docket No.	0687/74768-AAA/JPW/GJG/ACK

NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catlog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	26	Revised Amendment and Reply submitted August 10, 2009 in connection with U.S. Serial No. 11/364,183, filed March 1, 2006	
	27	Wolff et al. (1995) "Mutational analysis of human U6 RNA: stabilizing the intramolecular helix blocks the spliceosomal assembly pathway," Biochim. Biophys. Acta 1263: 39-44	
	28	Image of U6 snoRNA secondary structure retrieved from http://gene.fudan.sh.cn/snoRNASecStruct/Box%20C&D/Homo%20sapiens/U16_ss001.jpg on 9/17/09	
	29	Response submitted February 3, 2010 in connection with U.S. Serial No. 11/179,504, filed July 13, 2005	
	30	Advisory Action issued February 16, 2010 in connection with U.S. Serial No. 11/179,504, filed July 13, 2005	
	31	Notice of Allowability issued January 27, 2010 in connection with U.S. Serial No. 10/646,070, filed August 22, 2003	
	32	Allen et al. (2007) "Development of strategies for conditional RNA interference," J. Gene Med. 9: 287-298	
	34	Office Action issued August 28, 2009 in connection with Canadian Patent Application No. 2455490, issued by the Canadian Intellectual Property Office	
	35	Reply Brief to Examiner's Answer submitted on 3/8/10, in connection with merged Reexamination Control Nos. 90/007,247 and 90/008,096, filed October 4, 2004 and May 18, 2006, respectively	
	36	Request for Oral Hearing submitted 3/8/10, in connection with merged Reexamination Control Nos. 90/007,247 and 90/008,096, filed October 4, 2004 and May 18, 2006, respectively	
	37	Amendment in Response to October 9, 2009 Final Office Action as a Submission to Accompanying Request for Continued Examination submitted March 9, 2010 in connection with U.S. Serial No. 11/218,999, filed September 2, 2005	

**EXAMINER
SIGNATURE**
DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional) Applicant is to place a checkmark here if English language Translation is attached.

Form PTO-1449 (Substitute) U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Application Number	10/821,726
	Filing Date	April 8, 2004
	First Named Inventor	Michael Wayne Graham
	Art Unit	1635
	Examiner Name	Whiteman, Brian A.
	Attorney Docket No.	0687/74768-AAA/JPW/GJG/ACK

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	38	Office Action issued March 9, 2010 in connection with U.S. Serial No. 10/759,841, filed January 15, 2004	
	40	Office Action issued April 15, 2010 in connection with U.S. Serial No. 10/346,853, filed January 7, 2003	
	41	Amendment as a Submission to Accompanying Request for Continued Examination submitted April 19, 2010 in connection with U.S. Serial No. 11/179,504, filed July 13, 2005	
	42	Examiner Interview Summary Record (PTOL - 413) issued April 15, 2010 in connection with U.S. Serial No. 10/759,841, filed January 15, 2004	
	43	Office Action issued April 21, 2010 in connection with U.S. Serial No. 11/218,999, filed September 2, 2005	
	46	Wharton et al. (1994) Journal of General Virology, 75:945-948	
	47	Supplemental Information Disclosure Statement submitted April 27, 2010 in connection with U.S. Serial No. 10/646,070, filed August 22, 2003	
	48	Appeal Brief submitted April 8, 2010 in connection with U.S. Serial No. 09/287,632, filed April 7, 1999	
	49	Amendment submitted February 12, 2010 in connection with U.S. Serial No. 11/841,737, filed August 20, 2007	
	50	Final Rejection issued April 23, 2010 in connection with U.S. Serial No. 11/841,737, filed August 20, 2007	
	51	Supplementary European Search Report issued February 12, 2010 in connection with European Patent Application No. 04761272	

**EXAMINER
SIGNATURE**

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional) Applicant is to place a checkmark here if English language Translation is attached.

Form PTO-1449 (Substitute) U.S. Department of Commerce Patent and Trademark Office		Application Number	10/821,726
		Filing Date	April 8, 2004
		First Named Inventor	Michael Wayne Graham
		Art Unit	1635
		Examiner Name	Whiteman, Brian A.
		Attorney Docket No.	0687/74768- AAA/JPW/GJG/ACK

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume/issue number(s), publisher, city and/or country where published.	T²
	56	Beck, J., et al. (1995), "Efficient hammerhead ribozyme-mediated cleavage of the structured hepatitis B virus encapsidation signal in vitro and in cell extracts, but not in intact cells," Nucleic Acids Research, vol. 23, no. 24: 4954-4962	
	57	De Angelis, F.G., et al. (2002), "Chimeric snRNA molecules carrying antisense sequences against the splice junctions of exon 51 of the dystrophin pre-mRNA induce exon skipping and restoration of a dystrophin synthesis in delta 48-50 DMD cells," PNAS, vol. 99, no. 14: 9456-9461	
	58	Suter, D., et al. (1999), "Double-target antisense U7 snRNAs promote efficient skipping of an aberrant exon in three human beta-thalassemic mutations," Human Molecular Genetics, vol. 8: 2415-2423	
	59	Baulcomb (1996), "Mechanisms of Pathogen-Derived Resistance to Viruses in Transgenic Plants," Plant Cell, vol 8:1833-1844	
	61	Nobelprize.org: The Nobel Prize in Physiology or Medicine 2006, Press Release of the Nobel Assembly at Karolinska Institute (October 2, 2006)	
	62	Genbank Accession No. L26296, June 28, 1994	
	63	Genbank Accession No. AF 124360, July 21, 2000	
	64	Genbank Accession No. A65102, November 14, 2006	
	65	Genbank Accession No. AF043841, June 5, 1999	
	68	Request for Ex Parte Reexamination of U.S. Patent No. 7,138,565, including Exhibits A-K, submitted April 9, 2010	
	69	Notice of Reexamination Request Filing Date, issued April 20, 2010 in connection with Reexamination Control No. 90/009,722, filed April 12, 2010	

EXAMINER SIGNATURE	DATE CONSIDERED
---------------------------	------------------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional) Applicant is to place a checkmark here if English language Translation is attached.

Form PTO-1449 (Substitute) U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Application Number	10/821,726
	Filing Date	April 8, 2004
	First Named Inventor	Michael Wayne Graham
	Art Unit	1635
	Examiner Name	Whiteman, Brian A.
	Attorney Docket No.	0687/74768- AAA/JPW/GJG/ACK

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume/issue number(s), publisher, city and/or country where published.	T ²
	70	Notice of Assignment of Reexamination Request, issued April 20, 2010 in connection with Reexamination Control No. 90/009,722, filed April 12, 2010	
	71	Order Granting Request for Ex Parte Reexamination, issued May 13, 2010 in connection with Reexamination Control No. 90/009,722, filed April 12, 2010	
	72	Reply to the November 4, 2009 Office Action submitted May 4, 2010 in connection with U.S. Serial No. 11/364,183, filed March 1, 2006	
	73	Office Action issued September 12, 2008 in connection with U.S. Serial No. 11/593,056, filed November 6, 2006	
	74	Amendment submitted March 12, 2009 in connection with U.S. Serial No. 11/593,056, filed November 6, 2006	
	75	Office Action issued June 24, 2009 in connection with U.S. Serial No. 11/593,056, filed November 6, 2006	
	76	Amendment submitted December 23, 2009 in connection with U.S. Serial No. 11/593,056, filed November 6, 2006	
	77	Final Office Action issued March 24, 2010 in connection with U.S. Serial No. 11/593,056, filed November 6, 2006	
	78	Doelling et al. (1995), PNAS Vol 8:683-692	
	79	Examination Report issued May 10, 2010 in connection with European Patent Application No. 02748428.6	
	80	Office Communication issued June 8, 2010 in connection with U.S. Serial No. 11/364,183, filed March 1, 2006	
	81	Issue Notification issued June 23, 2010 in connection with U.S. Serial No. 10/646,070, filed August 22, 2003	

**EXAMINER
SIGNATURE**
DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional) Applicant is to place a checkmark here if English language Translation is attached.

Form PTO-1449 (Substitute) U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Application Number	10/821,726
	Filing Date	April 8, 2004
	First Named Inventor	Michael Wayne Graham
	Art Unit	1635
	Examiner Name	Whiteman, Brian A.
	Attorney Docket No.	0687/74768- AAA/JPW/GJG/ACK

NON PATENT LITERATURE DOCUMENTS

Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume/issue number(s), publisher, city and/or country where published.	T ²
	82	Office Communication issued June 11, 2010 in connection with U.S. Serial No. 11/364,183, filed March 1, 2006	
	83	June 17, 2010 Declaration of Interference issued in connection with U.S. Serial No. 11/364,183, filed March 1, 2006	
	84	June 15, 2010 Amendment in Response to March 9, 2010 Office Action, Summary of April 8, 2010 Examiner Interview, and Supplemental Information Disclosure Statement submitted in connection with U.S. Serial No. 10/759,841, filed January 15, 2004	
	85	Communication in Response to December 30, 2009 Office Action, Petition for Three-Month Extension of Time and Supplemental Information Disclosure Statement submitted June 30, 2010 in connection with U.S. Serial No. 10/482,888, filed June 14, 2004	
	86	June 15, 2010 Supplemental Information Disclosure Statement submitted in connection with U.S. Serial No. 10/759,841, filed January 15, 2004	
	87	September 29, 2010 Decision of the BPAI in connection with merged Reexamination Control Nos. 90/007,247 and 90/008,096, filed October 4, 2004 and May 18, 2006, respectively	
	88	September 1, 2010 Notice of Allowance issued in connection with U.S. Serial No. 10/759,841, filed January 15, 2004	
	90	September 22, 2010 Final Office Action issued in connection with U.S. Serial No. 10/482,888, filed June 14, 2004	
	91	Examiner's Answer issued July 7, 2010 in connection with U.S. Serial No. 09/287,632, filed April 7, 1999	
	92	Reply Brief submitted September 7, 2010 in connection with U.S. Serial No. 09/287,632, filed April 7, 1999	
	93	Redeclaration of Interference issued July 6, 2010 in connection with U.S. Serial No. 11/364,183, filed March 1, 2006	

**EXAMINER
SIGNATURE**

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.¹ Applicant's unique citation designation number (optional)³ Applicant is to place a checkmark here if English language Translation is attached.

Form PTO-1449 (Substitute) U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Application Number	10/821,726
	Filing Date	April 8, 2004
	First Named Inventor	Michael Wayne Graham
	Art Unit	1635
	Examiner Name	Whiteman, Brian A.
	Attorney Docket No.	0687/74768-AAA/JPW/GJG/ACK

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume/issue number(s), publisher, city and/or country where published.	T ²
	94	Redeclaration of Interference issued September 10, 2010 in connection with U.S. Serial No. 11/364,183, filed March 1, 2006	
	95	Office Action issued September 30, 2010 in connection with Reexamination Control No. 90/009,722, filed April 12, 2010	
	99	Waibel et al. (1990) "RNA polymerase specificity of transcription of Arabidopsis U snRNA genes determined by promoter element spacing," Letters to Nature, vol 346, pp. 199-202)	
	100	Waibel et al., (1990) "U6 snRNA genes of Arabidopsis are transcribed by RNA polymerase III but contain the same two upstream promoter elements as RNA polymerase II transcribed U-snRNA genes," Nucleic Acids Research, vol 18, no. 12, pp. 3451-3458	
	101	Marshallsay et al. (1992) "Characterization of the U3 and U6 snRNA genes from wheat: U3 snRNA genes in monocot plants are transcribed by RNA polymerase III," Plant Molecular Biology, vol. 19, pp. 973-983	
	102	Redeclaration of Interference issued November 17, 2010 in connection with U.S. Serial No. 11/364,183, filed March 1, 2006	
	103	December 9, 2010 Petition to Withdraw from Issue Pursuant to 37 C.F.R. 1.313(c), including a Request for Continued Examination, Amendment, and Supplemental Information Disclosure Statement submitted in connection with U.S. Serial No. 10/759,841, filed January 15, 2004	
	104	November 30, 2010 Amendment submitted in connection with Reexamination Control No. 90/009,722, filed April 12, 2010	

**EXAMINER
SIGNATURE**
DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional) Applicant is to place a checkmark here if English language Translation is attached.